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Cont.
made of a material appropriate for human implantation].

9.(amended) The spinal fusion implant of claim 1 [having] in which said body has a plurality of openings [capable] for retaining fusion promoting material.

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10.(amended) The spinal fusion implant of claim 1 in which said [external] thread has a thread radius measured from the longitudinal central axis of said implant, said thread radius being substantially uniform throughout at least a portion of said implant.

11.(amended) The spinal fusion implant of claim 1 in which said [external] thread has a thread radius measured from the longitudinal central axis of said implant, said thread radius being variable along the length of said implant.

12.(amended) The spinal fusion implant of claim 1 in which said [external] thread has a thread height measured from said body which is variable along the length of said implant.

13.(amended) The spinal fusion implant of claim 1 in which said [external] thread beyond said insertion end has a thread height measured from said body which is substantially constant along the length of said implant.

N.E. 14. The spinal fusion implant of claim 1 in which said [outer surface is] body comprises a porous material [at least in part].

15.(amended) The spinal fusion implant of claim 1 in which said [implant] body has an internal chamber and [an access opening] means for accessing said internal chamber.

B⁵ 16.(amended) The spinal fusion implant of claim [16] 15 in which said internal chamber is capable of containing fusion promoting material.

17.(amended) The spinal fusion implant of claim [16] 15 in which said [implant comprises] body includes a wall surrounding said internal chamber.

18. (amended) The spinal fusion implant of claim [18] 17 in which said wall has a plurality of openings passing therethrough in communication with said internal chamber.

19.(amended) The spinal fusion implant of claim [16] 15 in which said [implant] body has means for closing said accessing means [access opening].

B⁶ 23.(amended) The spinal fusion implant of claim 1 [having] in which said body has a longitudinal central axis and at least one truncated side forming a planar surface parallel to said central

axis.

24.(amended) The spinal fusion implant of claim [24] 23 in which said [external] thread has a thread height measured from said body which is greatest at said truncated side.

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25.(amended) [A frusto-conical] An interbody spinal fusion implant for insertion across a disc space between two adjacent vertebrae of a human spine, the implant comprising[:] a body having a substantially frusto-conical configuration along at least a portion of said body oriented toward the adjacent vertebrae, said body having an insertion end, a trailing end, and an outer surface[; and an external] including a thread for engaging said implant to the adjacent vertebrae of the spine, the locus of said [external] thread forming a substantially cylindrical configuration[, said implant being made of a material appropriate for human implantation].

26.(amended) The implant of claim [26] 25 in which said body has a substantially frusto-conical configuration.

27.(amended) The implant of claim [26] 25 in which said body has at least in part a cylindrical configuration.

28.(amended) The spinal fusion implant of claim [26] 25 in which

said trailing end is larger than said insertion end.

29.(amended) The spinal fusion implant of claim [26] 25 in which said insertion end is larger than said trailing end.

30.(amended) The spinal fusion implant of claim [26] 25 in which said implant comprises a bone ingrowth material.

31.(amended) The spinal fusion implant of claim [26] 25 in which said implant comprises a fusion promoting material.

32.(amended) The spinal fusion implant of claim [26] 25 in which said implant is at least in part bioabsorbable.

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Cont.
33.(amended) The spinal fusion implant of claim [26 having] 25 in which said body has a plurality of openings [capable] for retaining fusion promoting material.

34.(amended) The spinal fusion implant of claim [26] 25 in which said [external] thread beyond said insertion end has a thread radius measured from the longitudinal central axis of said implant, said thread radius being substantially uniform throughout the length of said implant.

35.(amended) The spinal fusion implant of claim [26] 25 in which said [external] thread has a thread radius measured from the

longitudinal central axis of said implant, said thread radius being variable along at least a portion of said implant.

36.(amended) The spinal fusion implant of claim [26] 25 in which said [external] thread has a thread height measured from said body which is variable along the length of said implant.

37.(amended) The spinal fusion implant of claim [26] 25 in which said [external] thread has a thread height measured from said body which is substantially constant along at least a portion of said implant.

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Cont.
38.(amended) The spinal fusion implant of claim [26] 25 in which said [outer surface is] body comprises a porous material [at least in part].

39.(amended) The spinal fusion implant of claim [26] 25 in which said body [implant] has an internal chamber and [an access opening] means for accessing said internal chamber.

40.(amended) The spinal fusion implant of claim [26] 25 in which said internal chamber is capable of containing fusion promoting material.

41.(amended) The spinal fusion implant of claim [40] 39 in which said [implant comprises] body includes a wall surrounding said

internal chamber.

42.(amended) The spinal fusion implant of claim [40] 41 in which said wall has a plurality of openings passing therethrough in communication with said internal chamber.

43.(amended) The spinal fusion implant of claim [40] 39 in which said [implant] body has means for closing said accessing means [access opening].

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Cont.
44.(amended) The spinal fusion implant of claim [26] 25 in which one of said ends [of said implant] includes an engagement means for engaging instrumentation for the insertion of said implant.

45.(amended) The spinal fusion implant of claim [26] 25 in which at least a portion of said outer surface comprises wells having at least partial walls.

46.(amended) The spinal fusion implant of claim [26] 25 in which said implant is configured to be placed in close proximity in a side by side alignment to a second spinal fusion implant, said first and second implants when placed together having a combined overall width that is less than the sum of the individual maximum diameters of each of said first and second implants.

47.(amended) The spinal fusion implant of claim [26] 25 [having] in which said body has a longitudinal central axis and at least one truncated side forming a planar surface parallel to said central axis.

48.(amended) The spinal fusion implant of claim [48] 47 in which said [external] thread has a thread height measured from said body which is greatest at said truncated side.

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Cont.
49.(amended) An interbody spinal fusion implant for insertion across a disc space between adjacent vertebrae of a human spine, the implant comprising[:] a body having a substantially cylindrical configuration, a longitudinal central axis and at least one truncated side forming a planar surface parallel to said central axis, said body having an insertion end, a trailing end, and an outer surface[; and an external] including a thread for engaging said implant to adjacent vertebrae of the spine, the locus of said [external] thread forming a substantially cylindrical configuration[, said implant being made of a material appropriate for human implantation].

50.(amended) The spinal fusion implant of claim [50] 49 in which said implant comprises a bone ingrowth material.

51.(amended) The spinal fusion implant of claim [50] 49 in which said implant comprises a fusion promoting material.

52.(amended) The spinal fusion implant of claim [50] 49 in which said implant is at least in part bioabsorbable

53.(amended) The spinal fusion implant of claim [50] 49 having a plurality of openings capable retaining fusion promoting material.

54.(amended) The spinal fusion implant of claim [50] 49 in which said [external] thread has a thread radius measured from the longitudinal central axis of said implant, said thread radius being substantially uniform for at least a portion of said implant.

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Cont.
55.(amended) The spinal fusion implant of claim [50] 49 in which said [external] thread has a thread radius measured from the longitudinal central axis of said implant, said thread radius being variable along at least a portion of said implant.

56.(amended) The spinal fusion implant of claim [50] 49 in which said [external] thread has a thread height measured from said body which is variable along at least a portion of said implant.

57.(amended) The spinal fusion implant of claim [50] 49 in which said [external] thread has a thread height measured from said body which is substantially constant along the length of said implant.

58.(amended) The spinal fusion implant of claim [51 in which said outer surface is] 49 body comprises a porous material [at least in

part].

59.(amended) The spinal fusion implant of claim [51] 49 in which said [implant] body has an internal chamber and [an access opening] means for accessing said internal chamber.

60.(amended) The spinal fusion implant of claim [60] 59 in which said internal chamber is capable of containing fusion promoting material.

61.(amended) The spinal fusion implant of claim [60] 59 in which said [implant comprises] includes a wall surrounding said internal chamber.

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Cont.
62.(amended) The spinal fusion implant of claim [60] 59 in which said wall has a plurality of openings passing therethrough in communication with said internal chamber.

63.(amended) The spinal fusion implant of claim [60] 59 in which said implant has means for closing said accessing means [access opening].

64.(amended) The spinal fusion implant of claim [51] 49 in which one of said ends [of said implant] includes an engagement means for engaging instrumentation for the insertion of said implant.

65.(amended) The spinal fusion implant of claim [51] 49 in which at least a portion of said outer surface comprises wells having at least partial walls.

66.(amended) The spinal fusion implant of claim [51] 49 in which said implant is configured to be placed in close proximity in a side by side alignment to a second spinal fusion implant, said first and second implants when placed together having a combined overall width that is less than the sum of the individual maximum diameters of each of said first and second implants.

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Cont.
67.(amended) The spinal fusion implant of claim [51 having a longitudinal central axis and at least one] 49 in which said body has a second truncated side forming a planar surface parallel to said central axis and opposite to said one truncated side.

68.(amended) The spinal fusion implant of claim [68] 67 in which said [external] thread has a thread height measured from said body which is greatest at said truncated side.

69.(amended) [A frusto-conical] An interbody spinal fusion implant for insertion across a disc space between two adjacent vertebrae, the implant comprising[:] a body having a substantially frusto-conical configuration along at least a portion of said body oriented toward the adjacent vertebrae, said body having, an insertion end, a trailing end, and an outer surface[; and an

external] including a thread for engaging said implant to the adjacent vertebrae of the spine, said implant being made of a material appropriate for human implantation.

70.(amended) The implant of claim [70] 69 in which said the outer locus of said [external] thread forms a substantially cylindrical configuration.

71.(amended) The spinal fusion implant of claim [70] 69 in which said insertion end is larger than said trailing end.

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cont.
72.(amended) The spinal fusion implant of claim [72] 71 in which said insertion end comprises a tapered leading portion.

73.(amended) The spinal fusion implant of claim [70] 69 in which said trailing end is larger than said insertion end.

74.(amended) The spinal fusion implant of claim [70] 69 in which said implant comprises a bone ingrowth material.

75.(amended) The spinal fusion implant of claim [70] 69 in which said implant comprises a fusion promoting material.

76.(amended) The spinal fusion implant of claim [70] 69 in which said implant is at least in part bioabsorbable.

77.(amended) The spinal fusion implant of claim [70] 69 [having] in which said body has a plurality of openings [capable] for retaining fusion promoting material.

78.(amended) The spinal fusion implant of claim [70] 69 in which said [external] thread has a thread radius measured from the longitudinal central axis of said implant, said thread radius being substantially uniform throughout the length of said implant.

79.(amended) The spinal fusion implant of claim [70] 69 in which said [external] thread has a thread radius measured from the longitudinal central axis of said implant, said thread radius being variable along the length of said implant.

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Cont.
80.(amended) The spinal fusion implant of claim [70] 69 in which said [external] thread has a thread height measured from said body which is variable along the length of said implant.

81.(amended) The spinal fusion implant of claim [70] 69 in which said [external] thread has a thread height measured from said body which is substantially constant along the length of said implant.

82.(amended) The spinal fusion implant of claim [70] 69 in which said [outer surface is] body comprises a porous material [at least in part].

83.(amended) The spinal fusion implant of claim [70] 69 in which said [implant] body has an internal chamber and an access opening for accessing said internal chamber.

84.(amended) The spinal fusion implant of claim [84] 83 in which said internal chamber is capable of retaining fusion promoting material.

85.(amended) The spinal fusion implant of claim [84] 83 in which said [implant comprises] body includes a wall surrounding said internal chamber.

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Cont.
86.(amended) The spinal fusion implant of claim [84] 85 in which said wall has a plurality of openings passing therethrough in communication with said internal chamber.

87.(amended) The spinal fusion implant of claim [84] 83 in which said [implant] body has means for closing said accessing means [access opening].

88.(amended) The spinal fusion implant of claim [70] 69 in which one of said ends [of said implant] includes an engagement means for engaging instrumentation for the insertion of said implant.

89.(amended) The spinal fusion implant of claim [70] 69 in which at least a portion of said outer surface comprises wells having at

least partial walls.

90.(amended) The spinal fusion implant of claim [70] 69 in which said implant is configured to be placed in close proximity in a side by side alignment to a second spinal fusion implant, said first and second implants when placed together having a combined overall width that is less than the sum of the individual maximum diameters of each of said first and second implants.

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cont
91.(amended) The spinal fusion implant of claim [70 having] 69 in which said body has a longitudinal central axis and at least one truncated side forming a planar surface parallel to said central axis.

92.(amended) The spinal fusion implant of claim [92] 91 in which said [external] thread has a thread height which when measured from said body [which] is at its greatest [at] on said truncated side.

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94.(amended) The spinal fusion implant of claim [26] 25 in which said implant has an upper and lower portion for engaging the bone of the adjacent vertebrae, said upper and lower surfaces comprising a plurality of macroscopic openings.

95.(amended) The spinal fusion implant of claim [50] 49 in which said implant has an upper and lower portion for engaging the bone of the adjacent vertebrae, said upper and lower surfaces comprising

a plurality of macroscopic openings.

96.(amended) The spinal fusion implant of claim [70] 69 in which said implant has an upper and lower portion for engaging the bone of the adjacent vertebrae, said upper and lower surfaces comprising a plurality of macroscopic openings.

B7
97.(amended) The spinal fusion implant of claim [24] 23 in which said [external] thread is continuous over at least a portion of said truncated side.

Please add the following new claims:

98.(new) The spinal fusion implant of claim 1 in which said thread has a height measured from said body that is larger at said trailing end than at said insertion end.

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99.(new) The spinal fusion implant of claim 1 in which said body has a plurality of openings passing therethrough so as to allow bone to grow through said implant from one of the adjacent vertebrae to another of the adjacent vertebrae.

100.(new) The spinal fusion implant of claim 23 in which said body has a second truncated side forming a planar surface parallel to said central axis and opposite to said one truncated side.

101.(new) The spinal fusion implant of claim 25 in which said thread has a height measured from said body that is larger at said

trailing end than at said insertion end.

102.(new) The spinal fusion implant of claim 25 in which said body has a plurality of openings passing therethrough so as to allow bone to grow through said implant from one of the adjacent vertebrae to another of the adjacent vertebrae.

103.(new) The spinal fusion implant of claim 47 in which said body has a second truncated side forming a planar surface parallel to said central axis and opposite to said one truncated side.

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Cont.
104.(new) The spinal fusion implant of claim 49 in which said body has a plurality of openings passing therethrough so as to allow bone to grow through said implant from one of the adjacent vertebrae to another of the adjacent vertebrae.

105.(new) The spinal fusion implant of claim 69 in which said thread has a height measured from said body that is larger at said trailing end than at said insertion end.

106.(new) The spinal fusion implant of claim 69 in which said body has a plurality of openings passing therethrough so as to allow bone to grow through said implant from one of the adjacent vertebrae to another of the adjacent vertebrae.

107.(new) The spinal fusion implant of claim 91 in which said body

has a second truncated side forming a planar surface parallel to said central axis and opposite to said one truncated side.

108.(new) An interbody spinal fusion implant for insertion across a disc space between adjacent vertebrae of a human spine, the implant comprising:

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Cont
a body having an outer surface, an insertion end, a trailing end, and a length between said insertion end and said trailing end, said body having transversely opposed arcuate portions oriented toward the adjacent vertebrae, said arcuate portions being in a diverging relationship to one another along the length of said body sufficient to induce angulation of the vertebrae, said outer surface comprising a thread for engaging said implant to the adjacent vertebrae of the spine.

109.(new) The spinal fusion implant of claim 108 in which said trailing end is larger than said insertion end.

110.(new) The spinal fusion implant of claim 108 in which said insertion end is larger than said trailing end.

111.(new) The spinal fusion implant of claim 108 in which said body has a plurality of openings for retaining fusion promoting material.

112.(new) The spinal fusion implant of claim 108 in which said

thread has a thread radius measured from the longitudinal central axis of said implant, said thread radius being substantially uniform throughout at least a portion of said implant.

113.(new) The spinal fusion implant of claim 108 in which said thread has a thread radius measured from the longitudinal central axis of said implant, said thread radius being variable along the length of said implant.

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Cont.
114.(new) The spinal fusion implant of claim 108 in which said thread has a thread height measured from said body which is variable along the length of said implant.

115.(new) The spinal fusion implant of claim 108 in which said body has an internal chamber and means for accessing said internal chamber.

116.(new) The spinal fusion implant of claim 115 in which said body has means for closing said accessing means.

117.(new) The spinal fusion implant of claim 108 in which at least a portion of said outer surface comprises wells having at least partial walls.

118.(new) The spinal fusion implant of claim 108 in which said implant is configured to be placed in close proximity in a side by

side alignment to a second spinal fusion implant, said first and second implants when placed together having a combined overall width that is less than the sum of the individual maximum diameters of each of said first and second implants.

119.(new) The spinal fusion implant of claim 108 in which said body has a longitudinal central axis and at least one truncated side forming a planar surface parallel to said central axis.

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cont.
120.(new) The spinal fusion implant of claim 119 in which said body has a second truncated side forming a planar surface parallel to said central axis and opposite to said one truncated side.

~~120~~¹²¹.(new) The spinal fusion implant of claim 108 in which said body has a plurality of openings passing therethrough so as to allow bone to grow through said implant from one of the adjacent vertebrae to another of the adjacent vertebrae.

~~121~~¹²².(new) The spinal fusion implant of the claim 108 in which said arcuate portions are along the entire length of said body.

~~122~~¹²³.(new) The spinal fusion implant of claim 108 in which the outer locus of the thread forms a substantially cylindrical configuration.

~~123~~¹²⁴.(new) The spinal fusion implant of claim 108 in which the outer

locus of the thread forms a substantially frusto-conical configuration.

¹²⁵
~~124.~~ (new) The spinal fusion implant of claim 108 is which said implant is made of a material that is stronger than bone.

¹²⁶
~~125.~~ (new) The spinal fusion implant of claim 1 is which said implant is made of a material that is stronger than bone.

¹²⁷
~~126.~~ (new) The spinal fusion implant of claim 25 is which said implant is made of a material that is stronger than bone.

B8
Cont. ¹²⁸
~~127.~~ (new) The spinal fusion implant of claim 49 is which said implant is made of a material that is stronger than bone.

¹²⁹
~~128.~~ (new) The spinal fusion implant of claim 69 is which said implant is made of a material that is stronger than bone.

¹³⁰
~~129.~~ (new) The spinal fusion implant of claim 1 in which said body has a length in the range of 10-32mm.

¹³¹
~~130.~~ (new) The spinal fusion implant of claim 25 in which said body has a length in the range of 10-32mm.

¹³²
~~131.~~ (new) The spinal fusion implant of claim 49 in which said body has a length in the range of 10-32mm.

¹³³
~~132.~~ (new) The spinal fusion implant of claim 69 in which said body has a length in the range of 10-32mm.

¹³⁴
~~133.~~ (new) The spinal fusion implant of claim 108 in which said length is in the range of 10-32mm.

¹³⁵
~~134.~~ (new) The spinal fusion implant of claim 1 having a diameter at said insertion end in the range of 8-22mm.

¹³⁶
~~135.~~ (new) The spinal fusion implant of claim 25 having a diameter at said insertion end in the range of 8-22mm.

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Cont
¹³⁷
~~136.~~ (new) The spinal fusion implant of claim 49 having a diameter at said insertion end in the range of 8-22mm.

¹³⁸
~~137.~~ (new) The spinal fusion implant of claim 69 having a diameter at said insertion end in the range of 8-22mm.

¹³⁹
~~138.~~ (new) The spinal fusion implant of claim 108 having a diameter at said insertion end in the range of 8-22mm.

¹⁴⁰
~~139.~~ (new) The spinal fusion implant of claim 1 having a diameter at said trailing end in the range of 10-24mm.

¹⁴¹
~~140.~~ (new) The spinal fusion implant of claim 25 having a diameter at said trailing end in the range of 10-24mm.